



PATENT  
Customer No. 58,982  
New Attorney Docket No. 08350.0357-00000

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: )  
)  
Eric W. NIELSEN et al. ) Group Art Unit: 2174  
)  
Application No.: 09/863,720 ) Examiner: Ke, Peng  
)  
Filed: May 23, 2001 ) Confirmation No.: 1496  
)  
For: GRAPHICAL USER INTERFACE )  
METHOD AND APPARATUS FOR )  
INTERACTION WITH FINITE )  
ELEMENT ANALYSIS )  
APPLICATIONS )

**Attention: Mail Stop Appeal Brief-Patents**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**APPEAL BRIEF UNDER BOARD RULE § 41.37**

In support of the Notice of Appeal filed November 14, 2005, and in response to the Pre-Appeal Review decision dated August 14, 2006, Appellants present this brief in accordance with Rule 41.37 and enclose herewith a check for the fee of \$500.00 required under 37 C.F.R. § 1.17(c), together with a two month extension fee of \$450.00.

This Appeal is in response to the rejection of claims 1-24 in the Office Action mailed on July 13, 2005, the status of which was reiterated on August 14, 2006.

If any additional fees are required or if the enclosed payment is insufficient, Appellants request that the required fees be charged to Deposit Account No. 06-0916.

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**Real Party In Interest**

Caterpillar Inc. is the real party in interest.

**Related Appeals and Interferences**

There are currently no other appeals or interferences of which Appellants, Appellants' legal representative, or Assignee are aware, that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**Status Of Claims**

Claims 1-24 are pending in this application. Claims 1-24 have been rejected and their rejection is appealed. A copy of these claims is provided in the attached Claims Appendix to this Appeal Brief.

**Status Of Amendments**

No amendments to the claims have been filed subsequent to the rejection of claims 1-24 mailed on July 13, 2005.

### **Introduction**

Unlike the two prior art references cited by the Examiner, the claimed invention involves an interface specifically geared toward finite element analysis (FEA). FEA is a method generally employed to analyze systems that defy closed-form analytical solutions. For example, FEA is used to determine stresses and displacements in mechanical objects and to analyze heat transfer, fluid dynamics, and electromagnetism problems. Neither of the references cited by the Examiner in any way involve FEA. Rather, they involve manipulating a computer model to pre-view different mating surfaces.

Apparently, the Examiner believes that because the prior art and disclosed embodiments of the invention both employ windows-like displays, they are one and the same. They are not. Each of the rejected claims involves "meshing." Meshing is a process where an object under study is discretized to form a grid. None of the cited references involve meshing. In addition, aspects of the invention also include a count input window for designating an interval size field indicative of a size of the mesh entities; an interval set field indicative of a circumstance under which the interval fields may be modified; a mesh scheme field indicative of a desired mesh scheme; and a smooth scheme field indicative of a process of improving an element quality after a mesh generation. These features are neither taught nor suggested by the cited references.

**Summary Of Claimed Subject Matter**

Independent claim 1 is directed to a method of presenting a graphical user interface for a finite element analysis application on an electronic display device. See specification at page 2, paragraph no. 6, and Fig. 1. The method includes launching a parent graphics window on the electronic display device for displaying an image. See specification at page 2, paragraph no. 6, page 7, paragraph no. 35, and Fig. 2. The method also includes attaching a property input window to the parent graphics window for displaying and manipulating settings and attributes of an entity selected within the parent graphics window. See specification at page 2, paragraph no. 6, page 31, paragraph no. 121, and Fig. 2. As the specification explains, in a preferred embodiment, a first interface element of the property input window includes at least one of an interval count field indicative of a number of mesh entities that will fill the selected entity, an interval size field indicative of a size of the mesh entities that will fill the selected entity, an interval set field indicative of a circumstance under which the interval fields may be modified, a mesh scheme field indicative of a desired mesh scheme and a smooth scheme field indicative of a process of improving an element quality after a mesh generation. See specification at page 2, paragraph no. 6, page 31, paragraphs no. 121 and 122, page 32, paragraph no. 125, page 33, paragraph no. 126, Fig. 2, and Fig. 16a.

Independent claim 10 is directed to an apparatus for presenting a graphical user interface for a finite element analysis application on an electronic display device. See specification at page 3, paragraph no. 7, and Fig. 1. The method includes a computer programmed to launch a parent graphics window on the electronic display device for



displaying an image. See specification at page 3, paragraph no. 7, page 7, paragraph no. 35, and Fig. 2. The method also includes the computer programmed to attach a property input window to the parent graphics window for displaying and manipulating settings and attributes of an entity selected within the parent graphics window. See specification at page 2, paragraph no. 6, page 31, paragraph no. 121, and Fig. 2. As the specification explains, in a preferred embodiment, a first interface element of the property input window includes at least one of an interval count field indicative of a number of mesh entities that will fill said selected entity, an interval size field indicative of a size of the mesh entities that will fill the selected entity, an interval set field indicative of a circumstance under which the interval fields may be modified, a mesh scheme field indicative of a desired mesh scheme, and a smooth scheme field indicative of a process of improving said element quality after a mesh generation. See specification at page 2, paragraph no. 6, page 31, paragraphs no. 121 and 122, page 32, paragraph no. 125, page 33, paragraph no. 126, Fig. 2, and Fig. 16a.

The embodiment recited in independent claim 18 is directed to a method of presenting a graphical user interface tabbed-based menuing system on an electronic display device. See specification at page 3, paragraph no. 8, and Fig. 1. The method includes launching a parent window on the electronic display device for displaying an image. See specification at page 3, paragraph no. 8, page 7, paragraph no. 35, and Fig. 2. The method also includes attaching a child window to the parent window. See specification at page 3, paragraph no. 8, page 7, paragraph no. 35, and Fig. 2. The method further includes the child window including a first interface element having a first tab identifier and at least one iconic button. See specification at page 3, paragraph no.

8, page 10, paragraph no. 45, and Fig. 4a. The method also includes selection of the at least one iconic button associated with the first interface element outputting a second interface element having a second tab identifier. See specification at page 3, paragraph no. 8, page 12, paragraph no. 61, and Fig. 4a. According to the method, the second interface element overlaps the first interface element except for the first tab identifier. See specification at page 3, paragraph no. 8, page 12, paragraph no. 61, pages 15-16, paragraph no. 70, Fig. 4a, and Fig. 5a.

Independent claim 22 is directed to an apparatus for presenting a graphical user interface tabbed-based menuing system on an electronic display device. See specification at pages 3-4, paragraph no. 9, and Fig. 1. The method includes a computer programmed to launch a parent window on the electronic display device for displaying an image. See specification at pages 3-4, paragraph no. 9, page 7, paragraph no. 35, and Fig. 2. The method also includes attaching a child window to the parent window. See specification at pages 3-4, paragraph no. 9, page 7, paragraph no. 35, and Fig. 2. The method further includes the child window having a first interface element having a first tab identifier and at least one iconic button. See at specification at pages 3-4, paragraph no. 9, page 10, paragraph no. 45, and Fig. 4a. In addition, according to the method of claim 22, selection of at least one iconic button associated with the first interface element outputs a second interface element having a second tab identifier. See specification at pages 3-4, paragraph no. 9, page 12, paragraph no. 61, and Fig. 4a. The second interface element overlaps the first interface element except for the first tab identifier. See specification at pages 3-4, paragraph no. 9, page 12, paragraph no. 61, pages 15-16, paragraph no. 70, Fig. 4a, and Fig. 5a.

**Grounds of Rejection**

A. Claims 1, 2, 4, 6-11, 13, and 15-24 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,219,049 to Zuffante et al. ("Zuffante").

B. Claims 3, 5, 12, and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Zuffante in view of U.S. Patent No. 5,745,113 to Jordan et al. ("Jordan").

**Argument**

**A. The rejection of claims 1, 2, 4, 6-11, 13, and 15-24 under 35 U.S.C.**

**§ 102(e) as being anticipated by Zuffante should be withdrawn**

The Examiner rejected claims 1, 2, 4, 6-11, 13, and 15-24 under 35 U.S.C.

§ 102(e) as being anticipated by Zuffante. To anticipate a claim, the reference must teach each and every element of the claim. *Union Carbide Chemicals & Plastics Tech. Corp. v. Shell Oil Co.*, 308 F.3d 1167, 1188, 64 USPQ2d 1545, 1560 (Fed. Cir. 2002); see also M.P.E.P. § 2131. The Board should reverse the rejection because Zuffante does not teach each and every element of claims 1, 2, 4, 6-11, 13, and 15-24.

While, as discussed earlier, the invention expressly involves FEA, and meshing, Zuffante mentions neither FEA nor meshing. Rather Zuffante involves manipulating a computer model to pre-view different mating surfaces. Zuffante discloses that “[a] dynamic mate inferencing system permits display and manipulation of a computer model, including features of allowing a user to select a feature of the model, determining a characteristic geometry of the feature, [and] dynamically pre-viewing the mating of the feature component of the model.” Zuffante, Abstract. Zuffante adds that the system allows the “user to alternate between different mating scenarios,” and permits “the user to mate the feature to the component in the previewed geometry.” *Id.* In other words, Zuffante discloses manipulating a computer model to preview the mating of a feature of the model. This has nothing to do with the finite element analysis of the invention. As a result, Zuffante fails to disclose or suggest “at least one of an interval count field indicative of a number of mesh entities that will fill said selected entity, an interval size

field indicative of a size of said mesh entities that will fill said selected entity” and “a mesh scheme field indicative of a desired mesh scheme,” as required by independent claim 1. Accordingly, Zuffante cannot anticipate claim 1 and its dependent claims.

Zuffante does not even mention “meshing” because Zuffante is not related to finite element analysis. Claim 1 recites “[a] method of presenting a graphical user interface for a *finite element analysis* application on an electronic display device.” That is, claim 1 is directed to finite element analysis applications. Appellants point out, that “[m]eshing’ is discretizing a complex solid model into simple geometric, interconnected shapes, such as quadrilaterals, triangles (two dimensional) hexahedrals or tetrahedrals (three dimensional),” and that “[t]he mesh can be used as an input to a FEA [finite element analysis] program to solve for stresses or strains in the model.” Specification at page 27, paragraph no. 108. Zuffante does not disclose or suggest anything related to meshing.

It appears the Office Action confuses “mating” with “meshing.” According to the Office Action, Zuffante discloses “at least one of an interval count field indicative of a number of mesh entities that will fill said selected entity, an interval size field indicative of a size of said mesh entities that will fill said selected entity,” citing to col. 7, l. 46 - col. 8, l. 24 of Zuffante, and stating: “The Pop window allows users to modify the size of the object.” Office Action, date mailed July 13, 2005, at page 3. Appellants reiterate that meshing an object is not modifying its size but discretizing it into simple geometric, interconnected shapes. That is, the same size object is “divided up” to form a grid. The size of the object is not modified. Moreover, the citation to Zuffante the Office Action provides does not disclose meshing. It discloses that “a window 86 is presented when

the user selects the Parent/Child option from the pop-up menu 80 of Fig. 6” and adds that “[t]he Parent/Child option provides information about the parent and children relationships of the feature associated with the pop up window 80.” See Zuffante, col. 7, l. 64 - col. 8, l. 1. Nowhere is meshing mentioned.

The Office Action further incorrectly contends that Zuffante discloses “a meshing scheme field indicative of a desired mesh scheme and a smooth scheme field indicative of a process of improving said element quality after a mesh” and cites col. 19, ll. 30-50 of Zuffante for that proposition. Office Action, date mailed July 13, 2005, at page 3. Once again, the Office Action mischaracterizes Zuffante. Zuffante discloses that “feature 403 can then be dragged from the graphical browser portion to the modeling portion 42, in which case the system determines a characteristic set of geometries to be mated, based on known characteristics of the feature 403 selected from the graphical browser portion 44.” Zuffante, col. 19, ll. 36-41. This recitation concerns “mating” not “meshing,” as required by independent claim 1. Accordingly, reversal of the rejection against claim 1 and its dependent claims is requested.

Similar to the arguments presented above, Zuffante does not disclose each and every element of independent claim 10. Claim 10 recites, among other aspects, “first interface element of said property input window includes at least one of an interval count field indicative of a number of mesh entities that will fill said selected entity, an interval size field indicative of a size of said mesh entities that will fill said selected entity” and “a mesh scheme field indicative of a desired mesh scheme and a smooth scheme field indicative of a process of improving said element quality after a mesh generation.” As fully set forth above, Zuffante discloses that “[a] dynamic mate

inferencing system permits display and manipulation of a computer model, including features of allowing a user to select a feature of the model, determining a characteristic geometry of the feature, [and] dynamically pre-viewing the mating of the feature component of the model. Zuffante, Abstract. Zuffante fails to disclose or suggest “meshing” as used in finite element applications. Thus, reversal of the section 102(e) rejection of claim 10 and its dependent claims is respectfully requested.

With respect to the section 102(e) rejection of claim 18, Appellants submit that Zuffante fails to disclose each and every aspect of claim 18. For example, Zuffante does not disclose or suggest

attaching a child window to said parent window wherein said child window includes a first interface element having a first tab identifier and at least one iconic button wherein selection of said at least one iconic button associated with said first interface element outputs a second interface element having a second tab identifier wherein said second interface element overlaps said first interface element except for said first tab identifier.

According to the Office Action, Zuffante, at column 19, lines 30-50, discloses the above recitation, stating that “[w]hen item 402 and item 400 are placed together, item 402 overlaps the surface of the item 400.” Office Action, date mailed July 13, 2005, at page 5. Zuffante discloses that “the selection of a component can be made between two different components within the modeling portion 42,” and adds that “a feature 403 may be selected from the graphical browser portion 44, for example by positioning the mouse 34 over the feature 403 and clicking the left mouse button.” Zuffante, col. 19, ll. 31-36. Zuffante further adds that “the feature can then dragged from the graphical browser portion to the modeling portion 42.” Zuffante, col. 19, ll. 36-38.

However, Zuffante does not disclose or suggest claim 18's recitation that "selection of said at least one iconic button associated with said first interface element outputs a second interface element having a second tab identifier." Apparently, the Office Action equates two windows that might overlap each other, such as items 400 and 402 of Zuffante, with the above recitation. However, Zuffante fails to disclose or suggest that the selection of item 400 outputs item 402 or that the selection item 402 outputs item 400 as would be required to conform with claim 18. Accordingly Appellants request reversal of the section 102(e) rejection of claim 18 and its dependent claims.

Similar to the arguments presented above regarding claim 18, Appellants submit that Zuffante fails to disclose or suggest claim 22's recitation that "selection of said at least one iconic button associated with said first interface element outputs a second interface element having a second tab identifier." As noted above, Zuffante discloses that "a feature 403 may be selected from the graphical browser portion 44, for example by positioning the mouse 34 over the feature 403 and clicking the left mouse button." Zuffante, col. 19, ll. 31-36. Nowhere does Zuffante disclose or suggest selection of at least one iconic button associated with a first interface element outputting a second interface element having a second tab identifier, as required by claim 22. Accordingly reversal of the section 102(e) rejection of claim 22 and its dependent claims is requested.



**B. The rejection of claims 3, 5, 12, and 14 under 35 U.S.C. § 103(a) as being unpatentable over Zuffante in view of Jordan should be withdrawn**

The Examiner rejected claims 3, 5, 12, and 14 under 35 U.S.C. § 103(a) as being unpatentable over Zuffante in view of Jordan. Yet Jordan suffers from the same deficiencies as Zuffante. Like Zuffante, Jordan fails to disclose 1) finite element analysis; 2) meshing; 3) an interval count field indicative of a number of mesh entities; or 4) a mesh scheme field indicative of a desired mesh scheme. When two references fail to disclose multiple elements of a claim, their combination must teach or suggest each and every aspect of the claims. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); see also M.P.E.P. § 2143. Clearly, in this case, both references are lacking. Therefore, the Board should reverse this rejection because Zuffante and Jordan, either alone or in combination, fail to disclose or suggest each and every element of dependent claims 3, 5, 12, and 14.

Specifically, Jordan discloses “[a] system for recording and displaying information about work practice through a set of at least two different graphical tools.” Jordan, Abstract. Jordan further discloses “convenient and easily used tools for making maps of work practices and charting the relationships between and among workers.” Jordan, col. 4, ll. 22-24. Like Zuffante, Jordan fails to disclose or suggest, “at least one of an interval count field indicative of a number of mesh entities that will fill said selected entity, an interval size field indicative of a size of said mesh entities that will fill said selected entity” and “a mesh scheme field indicative of a desired mesh scheme,” as required by independent claim 1. Indeed the Office Action does not rely on Jordan to disclose or suggest the above recitation. Rather, the Office Action relies on Jordan for

allegedly disclosing "attaching a textual output window to said parent graphics window."

Office Action, date mailed July 13, 2005, at page 7.

Both references fail to disclose or suggest "meshing." Therefore, their combination cannot render claims 3, 5, 12, and 14 obvious, for a first reason. Both references fail to disclose or suggest "at least one of an interval count field indicative of a number of mesh entities that will fill said selected entity." Therefore, their combination cannot render claims 3, 5, 12, and 14 obvious, for a second reason. Both references fail to disclose or suggest "an interval size field indicative of a size of said mesh entities that will fill said selected entity." Therefore, their combination cannot render claims 3, 5, 12, and 14 obvious, for a third reason. And both references fail to disclose or suggest "a mesh scheme field indicative of a desired mesh scheme." Therefore, their combination cannot render claims 3, 5, 12, and 14 obvious, for a fourth reason.

Claims 2 and 5 depend from claim 1 and claims 12 and 14 depend from claim 10 and are therefore allowable for at least the same reasons that claims 1 and 10 are allowable. In addition, each of claims 2, 5, 12, and 14 recite unique combinations that are neither taught nor suggested by Zuffante and Jordan, either alone or in combination, and each is therefore also separately patentable. Therefore, the reversal of the section 103(a) rejection is respectfully requested.

**Conclusion**

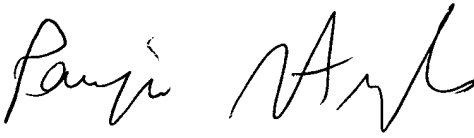
For the reasons given above, pending claims 1-24 are allowable, and reversal of the Examiner's rejection is respectfully requested.

To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this Appeal Brief, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: November 9, 2006

By:   
\_\_\_\_\_  
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**Claims Appendix to Appeal Brief Under Rule 41.37(c)(1)(viii)**

1. (Previously Presented) A method of presenting a graphical user interface for a finite element analysis application on an electronic display device, comprising:

launching a parent graphics window on said electronic display device for displaying an image; and

attaching a property input window to said parent graphics window for displaying and manipulating settings and attributes of an entity selected within said parent graphics window, wherein a first interface element of said property input window includes at least one of an interval count field indicative of a number of mesh entities that will fill said selected entity, an interval size field indicative of a size of said mesh entities that will fill said selected entity, an interval set field indicative of a circumstance under which said interval fields may be modified, a mesh scheme field indicative of a desired mesh scheme and a smooth scheme field indicative of a process of improving an element quality after a mesh generation.

2. (Original) The method of claim 1 further comprising attaching a task window to said parent graphics window for geometry creation, manipulation, and meshing of said entity within said parent graphics window, wherein a first interface element of said task window having a first tab identifier includes at least one of a first iconic button, adapted to providing creation capabilities of at least one of a vertex entity and curve entity and surface entity and volume entity and brick entity and sphere entity and cylinder entity and pyramid entity and torus entity and frustum entity, and a second iconic button adapted to providing modification capabilities of entities by at least one of

webcutting and imprinting and cleaning and combining and boolean operations and healing and positioning and scaling and separating and splitting and copying and merging and tweaking.

3. (Original) The method of claim 1 further comprising attaching a textual input window to said parent graphics window wherein first interface element of said textual input window includes a command line for entry of textual commands for said finite element analysis application execution.

4. (Original) The method of claim 1 further comprising attaching an entity tree window to said parent graphics window for displaying a graphical hierarchical representation of the parent child relationship of said entity selected within said graphics window or said entity tree window, wherein first interface element of said entity tree window includes parent and child entity names/IDs, ID icons, and mesh status check boxes.

5. (Original) The method of claim 1 further comprising attaching a textual output window to said parent graphics window wherein first interface element of said textual output window includes an output line having textual feedback of activity executed by said finite element analysis application.

6. (Original) The method of claim 2 wherein said task window includes an advanced selection dialogue interface for selection of said entity in said graphics window that is particularly difficult to select yet is required for finite element analysis application execution and wherein said advanced selection dialogue interface includes a

list box for displaying a current list of at least one said entity available for a particular FEA application command, and a required-entity field for displaying the number and type of said entity required for said finite element analysis application execution.

7. (Original) The method of claim 2 further comprising outputting a filter picking dialog interface window from said task window for filtering entities to parse out entities that match or do not match said entity characteristics, wherein said filter picking dialog interface window includes a filter-criteria field for including or excluding filtered entities and performing specified actions on said including or excluding filtered entities, and a register list box for listing at least one registered filter for limiting subsequent selection operations in said graphics window to those that meet said filter criteria.

8. (Original) The method of claim 7 wherein said registered filter is deactivated, so as to not limit said subsequent selection operations in said graphics window, while remaining a registered filter in said filter picking dialog interface window.

9. (Original) A computer-readable medium having computer-executable instructions for performing the steps recited in claim 1.

10. (Original) An apparatus for presenting a graphical user interface for a finite element analysis application on an electronic display device, the apparatus comprising a computer programmed to:

launch a parent graphics window on said electronic display device for displaying an image; and

attach a property input window to said parent graphics window for displaying and

manipulating settings and attributes of an entity selected within said parent graphics window, wherein first interface element of said property input window includes at least one of an interval count field indicative of a number of mesh entities that will fill said selected entity, an interval size field indicative of a size of said mesh entities that will fill said selected entity, an interval set field indicative of a circumstance under which said interval fields may be modified, a mesh scheme field indicative of a desired mesh scheme and a smooth scheme field indicative of a process of improving said element quality after a mesh generation.

11. (Original) The apparatus of claim 10 further comprising a computer programmed to:

attach a task window to said parent graphics window for geometry creation, manipulation, and meshing of said entity within said parent graphics window, wherein a first interface element of said task window having a first tab identifier includes at least one of a first iconic button, adapted to providing creation capabilities of at least one of a vertex entity and curve entity and surface entity and volume entity and brick entity and sphere entity and cylinder entity and pyramid entity and torus entity and frustum entity, and a second iconic button adapted to providing modification capabilities of entities by at least one of webcutting and imprinting and cleaning and combining and boolean operations and healing and positioning and scaling and separating and splitting and copying and merging and tweaking.

12. (Original) The apparatus of claim 10 further comprising a computer programmed to:

attach a textual input window to said parent graphics window wherein first interface element of said textual input window includes a command line for entry of textual commands for said finite element analysis application execution.

13. (Original) The apparatus of claim 10 further comprising a computer programmed to:

attach an entity tree window to said parent graphics window for displaying a graphical hierarchical representation of the parent child relationship of said entity selected within said graphics window or said entity tree window, wherein first interface element of said entity tree window includes parent and child entity names/IDs, ID icons, and mesh status check boxes.

14. (Original) The apparatus of claim 10 further comprising a computer programmed to:

attach a textual output window to said parent graphics window wherein first interface element of said textual output window includes an output line having textual feedback of activity executed by said finite element analysis application.

15. (Original) The apparatus of claim 11 wherein said task window includes an advanced selection dialogue interface for selection of said entity in said graphics window that is particularly difficult to select yet is required for finite element analysis application execution and wherein said advanced selection dialogue interface includes a list box for displaying a current list of at least one said entity available for a particular



FEA application command, and a required-entity field for displaying the number and type of said entity required for said finite element analysis application execution.

16. (Original) The apparatus of claim 11 further comprising a computer programmed to:

output a filter picking dialog interface window from said task window for filtering entities to parse out entities that match or do not match said entity characteristics, wherein said filter picking dialog interface window includes a filter-criteria field for including or excluding filtered entities and performing specified actions on said including or excluding filtered entities, and a register list box for listing at least one registered filter for limiting subsequent selection operations in said graphics window to those that meet said filter criteria.

17. (Original) The apparatus of claim 16 wherein said registered filter is deactivated, so as to not limit said subsequent selection operations in said graphics window, while remaining a registered filter in said filter picking dialog interface window.

18. (Original) A method of presenting a graphical user interface tabbed-based menuing system on an electronic display device, comprising:

launching a parent window on said electronic display device for displaying an image; and

attaching a child window to said parent window wherein said child window includes a first interface element having a first tab identifier and at least one iconic button wherein selection of said at least one iconic button associated with said first

interface element outputs a second interface element having a second tab identifier wherein said second interface element overlaps said first interface element except for said first tab identifier.

19. (Original) The method of claim 18, further comprising alternating between said first interface element and said second interface element by selecting said first tab identifier and said second tab identifier, respectively.

20. (Original) The method of claim 18, wherein said first tab identifier and said second tab identifier are oriented at bottom of said first interface element and said second interface element, respectively.

21. (Original) A computer-readable medium having computer-executable instructions for performing the steps recited in claim 18.

22. (Original) An apparatus for presenting a graphical user interface tabbed-based menuing system on an electronic display device, the apparatus comprising a computer programmed to:

launch a parent window on said electronic display device for displaying an image;  
and

attach a child window to said parent window wherein said child window includes a first interface element having a first tab identifier and at least one iconic button wherein selection of said at least one iconic button associated with said first interface element outputs a second interface element having a second tab identifier wherein said

second interface element overlaps said first interface element except for said first tab identifier.

23. (Original) The apparatus of claim 22, further comprising a computer programmed to:

alternate between said first interface element and said second interface element by selecting said first tab identifier and said second tab identifier, respectively.

24. (Original) The apparatus of claim 22, wherein said first tab identifier and said second tab identifier are oriented at bottom of said first interface element and said second interface element, respectively.

**Evidence Appendix**

None.

**Related Proceedings Appendix**

None.